

This syllabus is intended to aid instructors in providing training for this tool, and for quick reference by existing users. It is not intended to teach you the tool by itself.

1. Safety**1.1. PPE**

- Safety Glasses
- Wear sensible clothing
 - Closed toe shoes
 - Trousers
 - T-shirt

1.2. Risks

- in rare occasions needles can shatter
 - When this occurs, turn off the machine, and remove fragments from within and around the machine.
 - The machine can pivot backwards to reveal the inside allowing for easier access.
- Getting caught in the machine is a risk, however when properly guiding the material you should never be in a position where this is likely to happen.

1.3. Entanglement risks

- No loose clothing or cables
- No loose jewellery (e.g. watches)
- No gloves
- Long hair must be tied back

2. Startup checks**2.1. Thread the machine and bobbin if required**

- See manual (Hosted on Wiki) for documentation or ask a maintainer

2.2. Check the bobbin case is correctly installed

- See manual (Hosted on Wiki) for documentation or ask a maintainer

2.3. Check the needle and change/replace if needed

- The needle should be sharp and not bent
 - The needle should be fairly quiet when piercing the fabric, check by manually wheeling the machine and checking the force required and noise produced.
- See manual (Hosted on Wiki) for documentation or ask a maintainer

3. Usage**3.1. Starting the machine**

- Tap your tag on the access control box
- Turn on machine using switch
- Run the machine at max speed for 30 seconds to lubricate the internal mechanisms.

3.2. Stopping the machine

- Turn off machine using switch
- Log out using the button on the access control box

3.3. General

- Keep your hands to the sides of the path of the needle, and never in front.
- Don't pull/push the material through the machine, you only need to guide it.
 - For turns, you can use apply drag to one side of the fabric and it will pivot around that point, this achieves very smooth turns.

- Use an appropriate needle for the material.
 - Switch the needle to a leather needle for Vinyl, Leather and other non woven, knit or felted materials.
- Have your foot off the pedal when manually turning the machine or touching needle/bobbin.
- Be aware of how fast the machine
- Do not leave machine running unattended.

3.4. Materials

- Almost all fabrics are good, high-stretch fabrics can be used however the machine may struggle with them. Prefer to use a domestic sewing machine for those as they can achieve greater quality.
- If in doubt, contact a maintainer

3.5. Cleaning up

- Remove all fabric scraps from the machine, and clean dust that has been created by the fabric.
- Put thread trimmer on the hook.
- Opening the sewing machine to access the interior for cleaning.

4. Maintenance

4.1. General

- Changing Needles
- Cleaning inside and around the machine

5. Other

- Changing Oil
 - This only needs done if the oil gets excessively dirty, this has never actually been needed, and probably won't be for a good few years.
 - Drain oil bath, and fill to MAX line with appropriate oil